

CLAIM AMENDMENTS

1-71. (Canceled)

72. (New) A computer-implemented method for generating a schedule for a project, the method comprising:

receiving resource information describing resources available to tasks of the project and resource constraints, a first resource having a first resource constraint and a second resource having a second resource constraint, the first and second resources being different;

receiving task information identifying tasks of the project and task constraints, a task specifying one or more resources that are to be used to complete the task, at least one designated task having a designated task constraint and specifying at least the first resource and the second resource;

automatically dividing the designated task into a first assignment completable by only the first resource and having a first assignment constraint based on the designated task constraint, and a second assignment completable by only the second resource and having a second assignment constraint based on the designated task constraint;

scheduling the first assignment based at least on the first assignment constraint and the first resource constraint; and

after scheduling the first assignment, scheduling the second assignment based at least on the second assignment constraint and the second resource constraint.

73. (New) The method of claim 72 including:

receiving priorities for the tasks; and

scheduling the assignments of a high priority task before scheduling the assignments of a low priority task.

74. (New) The method of claim 72 including:
receiving priorities for the tasks;
setting priorities of assignments based on the priority of their tasks;
adjusting the priority of assignments based on availability of the resources of the
assignments; and
scheduling the assignments in the adjusted priority order.

75. (New) The method of claim 72 including:
receiving a specification of dependencies between tasks; and
scheduling the assignments of independent tasks before the assignments of
dependent tasks.

76. (New) The method of claim 72 including:
receiving a specification of dependencies between tasks; and
scheduling the assignments of tasks in dependency order of the tasks.

77. (New) The method of claim 72 including
receiving a time constraint of a task; and
scheduling the assignments of tasks so that the time constraint of the task is
satisfied.

78. (New) The method of claim 72 wherein the scheduling of the assignments of
tasks schedules assignments to satisfy start-on constraints before satisfying must-finish-by
constraints.

79. (New) A computer-readable medium encoded with computer-executable instructions for controlling a computer system to generate a schedule for a project, by a method comprising:

- providing resource information describing resources available to tasks of the project and resource constraints, a first resource having a first resource constraint and a second resource having a second resource constraint;
- providing task information identifying tasks of the project and task constraints, a task specifying one or more resources that are to be used to complete the task, at least one designated task having a designated task constraint and specifying at least the first resource and the second resource;
- automatically dividing the designated task into a first assignment completable by the first resource and having a first assignment constraint based on the designated task constraint, and a second assignment completable by the second resource and having a second assignment constraint based on the designated task constraint;
- scheduling the first assignment based at least on the first assignment constraint and the first resource constraint; and
- scheduling the second assignment based at least on the second assignment constraint and the second resource constraint.

80. (New) The computer-readable medium of claim 79 including:

- providing priorities for the tasks; and
- scheduling the assignments of a high priority task before scheduling the assignments of a low priority task.

81. (New) The computer-readable medium of claim 79 including:

- providing priorities for the tasks;
- setting priorities of assignments based on the priority of their tasks;

adjusting the priority of assignments based on availability of the resources of the assignments; and
scheduling the assignments in the adjusted priority order.

82. (New) The computer-readable medium of claim 79 including:
scheduling the assignments of independent tasks before the assignments of dependent tasks.

83. (New) The computer-readable medium of claim 79 including:
providing a specification of dependencies between tasks; and
scheduling the assignments of tasks in dependency order of the tasks.

84. (New) The computer-readable medium of claim 79 including
providing a time constraint of a task; and
scheduling the assignments of tasks so that the time constraint of the task is satisfied.

85. (New) The computer-readable medium of claim 79 wherein the scheduling of the assignments of tasks schedules assignments to satisfy start-on constraints before satisfying must-finish-by constraints.

86. (New) A computer system for generating a schedule for a project, comprising:

a computer-readable medium containing resource information describing resources available to tasks of the project and resource constraints, a first resource having a first resource constraint and a second resource having a second resource constraint, and containing task information identifying tasks of the project and task constraints, a task specifying one or more resources that are to be used to complete the task, at least one designated task having a

designated task constraint and specifying at least the first resource and the second resource;

a component to divide the designated task into a first assignment completable by the first resource and having a first assignment constraint based on the designated task constraint, and a second assignment completable by the second resource and having a second assignment constraint based on the designated task constraint; and

a component to schedule the first assignment based at least on the first assignment constraint and the first resource constraint and to schedule the second assignment based at least on the second assignment constraint and the second resource constraint.

87. (New) The computer system of claim 86 wherein the component that schedules the assignments schedules assignments of a high priority task before scheduling the assignments of a low priority task.

88. (New) The computer system of claim 86 wherein the component that schedules the assignments schedules the assignments in an adjusted priority order, the priority of an assignment based on the priority of its task and adjusted based on availability of resources of the assignments.

89. (New) The computer system of claim 86 wherein the component that schedules the assignments schedules assignments of independent tasks before the assignments of dependent tasks.

90. (New) The computer system of claim 86 wherein the component that schedules the assignments schedules assignments of tasks in dependency order of the tasks.

91. (New) The computer system of claim 86 wherein the component that schedules the assignments of tasks schedules assignments to satisfy start-on constraints before satisfying must-finish-by constraints.